



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/795,922	03/08/2004	Fatih Comlekoglu		1816
7590 Scot A. Reader, P.C. Suite 224 1320 Pearl St. Boulder, CO 80302				
			EXAMINER JOHNSON, CARLTON	
			ART UNIT 2136	PAPER NUMBER
			MAIL DATE 06/26/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/795,922

**Applicant(s)**

COMLEKOGU ET AL.

**Examiner**

CARLTON V. JOHNSON

**Art Unit**

2136

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 29-48,55,56 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 29-48,55,56 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This action is responding to application papers filed on **3-8-2004**.
2. Claims **29 - 48, 55, 56** are pending. Claims **1 - 28, 49 - 54** have been cancelled. Claims **55, 56** are new. Claims **29, 42, 55** are independent.

### ***Response to Arguments***

3. Applicant's arguments filed 10/24/2007 have been fully considered but they are moot due to new grounds of rejection.

#### **Responses:**

- 3.1 The USC 112 rejections have been withdrawn.

- 3.1 Applicant argues that the referenced prior art does not disclose, VPN monitoring.

Aiello prior art discloses VPN data packet monitoring to detect non-VPN traffic. (see Aiello paragraph [0007], lines 1-6; paragraph [0009], lines 1-5: data exchange over a secure channel such as a VPN tunnel, can be monitored to detect potential security breaches; monitor module)

- 3.2 Applicant argues that the referenced prior art does not disclose, prohibit permanent writing to permanent storage.

Harrison prior art discloses a prohibition of permanent writing on the client system of a VPN tunnel. (see Harrison col. 6, lines 28-31: provide client side persistent storage for untrusted clients; col. 4, lines 60-66: access to storage for client system;

Art Unit: 2136

storage integrity and security if removed from programmer : col. 5, lines 46-48: data repository size; col. 5, lines 52-55: expiration of predefined time period; temporary file (no writes to permanent storage on client system))

3.3 After an additional analysis of the applicant's invention, remarks, and a search of the available prior art, it was determined that the current set of prior art consisting of Aiello (20040123139), Harrison (6,691,113) and Cheline (20030041136) disclose the applicant's invention.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims **29 - 48, 55, 56** are rejected under 35 U.S.C. 103 (a) as being unpatentable over Aiello et al. (US PG PUB No. **20040123139**) in view of **Harrison et al.** (US Patent No. **6,691,113**) and further in view of **Cheline et al.** (US PG PUB No. **20030041136**).

**Regarding Claim 29**, Aiello discloses a method for reducing vulnerability of a Virtual Private Network (VPN) protected network to attack by an end system, comprising the steps of:

while permitting the access:

- b) continuously monitoring on the end system; (see Aiello paragraph [0007], lines 1-6; paragraph [0009], lines 1-5: data exchange over a secure channel such as a VPN tunnel, can be monitored to detect potential security breaches; monitor module)
- c) continuously monitoring on the end system for traffic on the end system and filtering detected traffic inbound to the end system that is not on the VPN connection; (see Aiello paragraph [0020], lines 3-7: packets are filtered and monitored to detect packets that do not meet security protocol requirements for a secure channel; paragraph [0009], lines 1-6: detect non-VPN traffic)
- d) continuously monitoring on the end system for termination of the VPN connection. (see Aiello paragraph [0007], lines 1-6; paragraph [0009], lines 1-5: data exchange over a secure channel such as a VPN tunnel, can be monitored to detect potential security breaches; monitor module (data exchange indicating session termination))

Aiello does not specifically disclose attempted writes to the end system and preventing attempted writes to permanent memory on the end system.

However, Harrison discloses attempted writes to the end system, preventing detected attempted writes to permanent memory on the end system and purging temporary memory on the end system in response to detected termination of the VPN connection. (see Harrison col. 6, lines 28-31: provide client side persistent storage for untrusted clients; col. 4, lines 60-66: access to storage for client system;

storage integrity and security if removed from programmer : col. 5, lines 46-48: data repository size; col. 5, lines 52-55: expiration of predefined time period; temporary file (no writes to permanent storage on client system))

It would have been obvious to one of ordinary skill in the art to modify Aiello for attempted writes to the end system, preventing detected attempted writes to permanent memory and purging temporary memory on the end system as taught by Harrison. One of ordinary skill in the art would have been motivated to employ the teachings of Harrison in order to allow untrusted applets to have access to persistent storage without compromising the integrity of the client computer system. (see Harrison col. 4, lines 60-62: “... *A benefit of the present invention is that it allows untrusted applets to have access to persistent storage without compromising the integrity of the client computer system. ...*”)

Aiello discloses wherein permitting access by an end system to a VPN protected network on at least one VPN connection for a user of the end system to the VPN protected network. (see Aiello paragraph [0007], lines 1-6; paragraph [0009], lines 1-5: data exchange over a secure channel such as a VPN tunnel, can be monitored to detect potential security breaches; monitor module) Aiello does not specifically disclose authenticating a user of the end system.

However, Cheline discloses:

- a) authenticating a user of the end system; (see Cheline paragraph [0049], lines 1-10: user authenticated; paragraph [0049], lines 11-14: permit access (encrypted packets transferred) to end system)

It would have been obvious to one of ordinary skill in the art to modify Aiello for authenticating a user of the end system as taught by Cheline. One of ordinary skill in the art would have been motivated to employ the teachings of Cheline in order to provide a less complex, less efficient, and less costly method for configuring a VPN is provided. (see Cheline paragraph [0017], lines 1-5: “... *Using the above, a less complex, less efficient, and less costly method for configuring a VPN is provided, thereby allowing the resources of a service provider to be redirected to areas other than manually configuring the system. ...*”)

**Regarding Claims 30, 43,** Aiello discloses the method, end system of claims 29, 42, wherein continuous monitoring. (see Aiello paragraph [0007], lines 1-6; paragraph [0009], lines 1-5: data exchange over a secure channel such as a VPN tunnel, can be monitored to detect potential security breaches; monitor module) Aiello does not specifically disclose the step of attempted writes to the end system further comprising redirecting to temporary memory detected attempted writes to permanent memory. However, Harrison discloses wherein the step of attempted writes to the end system further comprises redirecting to temporary memory detected attempted writes to permanent memory. (see Harrison col. 6, lines 28-31: provide client side persistent storage for untrusted clients; col. 4, lines 60-66: access to storage for client system; storage integrity and security if removed from programmer : col. 5, lines 46-48: data repository size; col. 5, lines 52-55: expiration of predefined time period; temporary file (no writes to permanent storage on client system))

It would have been obvious to one of ordinary skill in the art to modify Aiello for attempted writes to permanent memory redirected to temporary memory as taught by Harrison. One of ordinary skill in the art would have been motivated to employ the teachings of Harrison in order to allow untrusted applets to have access to persistent storage without compromising the integrity of the client computer system. (see Harrison col. 4, lines 60-62)

**Regarding Claims 31, 44,** Aiello discloses the method, end system of claims 29, 42 wherein the step of continuously monitoring for traffic on the end system comprises filtering detected traffic outbound from the end system that is not on the VPN connection. (see Aiello paragraph [0009], lines 1-6: monitor module detects non-VPN packets)

**Regarding Claims 32, 45,** Aiello discloses the method, end system of claims 29, 42. (see Aiello paragraph [0007], lines 1-6; paragraph [0009], lines 1-5: data exchange over a secure channel such as a VPN tunnel, can be monitored to detect potential security breaches; monitor module) Aiello does not specifically disclose before permitting the access, the step of denying network access except for performing user authentication. However, Cheline discloses further comprising, before permitting the access, the step of denying network access except for performing user authentication. (see Cheline paragraph [0043], lines 1-8; paragraph [0069], lines 4-11: access only after user authentication)



It would have been obvious to one of ordinary skill in the art to modify Aiello for the step of denying network access except for performing user authentication as taught by Cheline. One of ordinary skill in the art would have been motivated to employ the teachings of Cheline in order to provide a less complex, less efficient, and less costly method for configuring a VPN is provided. (see Cheline paragraph [0017], lines 1-5)

**Regarding Claim 33**, Aiello discloses the method of claim 29, wherein the monitoring steps are performed by the end system. (see Aiello paragraph [0010], lines 1-4: module or filter modules are co-located on one or more of the tunnel hosts (end systems))

**Regarding Claim 34**, Aiello discloses the method of claim 33, wherein the monitoring steps are performed by software having instructions executable by a processor. (see Aiello paragraph [0054], lines 1-3: crypto modules and monitors (software modules) can be done in hardware or software)

**Regarding Claims 35, 46**, Aiello discloses the method, end system of claims 34, 42, wherein the software is embedded in permanent memory. (see Aiello paragraph [0054], lines 1-3: monitors done (implemented) in software; paragraph [0048], lines 7-14: tunnels hosts include various computers and workstations running any number of operation systems; portable computers (permanent memory used to hold operational software for portable computers))

**Regarding Claims 36, 47,** Aiello discloses the method, end system of claims 35, 42, wherein the software. (see Aiello paragraph [0054], lines 1-3: monitors done (implemented) in software; paragraph [0048], lines 7-14: tunnels hosts include various computers and workstations running any number of operation systems; portable computers) Aiello does not specifically disclose being adapted to inhibit modification of the software by the user. However, Harrison discloses wherein adapted to inhibit modification of the software by the user. (see Harrison col. 6, lines 28-31: provide client side persistent storage for untrusted clients; col. 4, lines 60-66: access to storage for client system; storage integrity and security if removed from programmer : col. 5, lines 46-48: data repository size; col. 5, lines 52-55: expiration of predefined time period; temporary file (no writes to permanent storage on client system; no modification of software on permanent storage by user))

It would have been obvious to one of ordinary skill in the art to modify Aiello whereby adapted to inhibit modification of the software by the user as taught by Harrison. One of ordinary skill in the art would have been motivated to employ the teachings of Harrison in order to allow untrusted applets to have access to persistent storage without compromising the integrity of the client computer system. (see Harrison col. 4, lines 60-62)

**Regarding Claim 37,** Aiello discloses the method of claim 29. (see Aiello paragraph [0007], lines 1-6; paragraph [0009], lines 1-5: data exchange over a secure channel such as a VPN tunnel, can be monitored to detect potential security breaches; monitor

module) Aiello does not specifically disclose the step of monitoring for termination by logging-off the user in response to detected termination of the VPN connection. However, Cheline discloses wherein the step of monitoring for termination further comprises logging-off the user in response to detected termination of the VPN connection. (see Cheline paragraph [0076], lines 1-5: relogin, restarting end system)

It would have been obvious to one of ordinary skill in the art to modify Aiello for logging-off the user in response to detected termination of the VPN connection as taught by Cheline. One of ordinary skill in the art would have been motivated to employ the teachings of Cheline in order to provide a less complex, less efficient, and less costly method for configuring a VPN is provided. (see Cheline paragraph [0017], lines 1-5)

**Regarding Claim 38**, Aiello discloses the method of claim 29, wherein the step of monitoring for termination. (see Aiello paragraph [0007], lines 1-6; paragraph [0009], lines 1-5: data exchange over a secure channel such as a VPN tunnel, can be monitored to detect potential security breaches; monitor module) Aiello does not specifically disclose rebooting the end system in response to detected termination of the VPN connection. However, Cheline discloses wherein further comprising rebooting the end system in response to detected termination of the VPN connection. (see Cheline paragraph [0076], lines 1-5: relogin, restarting end system)

It would have been obvious to one of ordinary skill in the art to modify Aiello to reboot the end system in response to detected termination of the VPN connection as

taught by Cheline. One of ordinary skill in the art would have been motivated to employ the teachings of Cheline in order to provide a less complex, less efficient, and less costly method for configuring a VPN is provided. (see Cheline paragraph [0017], lines 1-5)

**Regarding Claim 39**, Aiello discloses the method of claim 29, wherein the step of monitoring for termination. (see Aiello paragraph [0007], lines 1-6; paragraph [0009], lines 1-5: data exchange over a secure channel such as a VPN tunnel, can be monitored to detect potential security breaches; monitor module) Aiello does not specifically disclose shutting down the end system in response to detected termination of the VPN connection. However, Cheline discloses wherein further comprises shutting down the end system in response to detected termination of the VPN connection. (see Cheline paragraph [0076], lines 10-14: VPN disconnected, tunnel torn down)

It would have been obvious to one of ordinary skill in the art to modify Aiello for shutting down the end system in response to detected termination of the VPN connection as taught by Cheline. One of ordinary skill in the art would have been motivated to employ the teachings of Cheline in order to provide a less complex, less efficient, and less costly method for configuring a VPN is provided. (see Cheline paragraph [0017], lines 1-5)

**Regarding Claim 40**, Aiello discloses the method of claim 29. (see Aiello paragraph [0007], lines 1-6; paragraph [0009], lines 1-5: data exchange over a secure channel

such as a VPN tunnel, can be monitored to detect potential security breaches; monitor module) Aiello does not specifically disclose flash memory. However, Cheline discloses wherein permanent memory comprises a flash memory. (see Cheline paragraph [0047], lines 16-17; paragraph [0057], lines 3-5: flash memory)

It would have been obvious to one of ordinary skill in the art to modify Aiello for permanent memory comprising a flash memory as taught by Cheline. One of ordinary skill in the art would have been motivated to employ the teachings of Cheline in order to provide a less complex, less efficient, and less costly method for configuring a VPN is provided. (see Cheline paragraph [0017], lines 1-5)

**Regarding Claim 41**, Aiello discloses the method of claim 29. (see Aiello paragraph [0007], lines 1-6; paragraph [0009], lines 1-5: data exchange over a secure channel such as a VPN tunnel, can be monitored to detect potential security breaches; monitor module) Aiello does not specifically disclose a random access memory (RAM) disk. However, Cheline discloses wherein temporary memory comprises a random access memory (RAM) disk. (see Cheline paragraph [0047], lines 1-10: permanent type memory (RAM) for program such as operating system)

It would have been obvious to one of ordinary skill in the art to modify Aiello for a random access memory (RAM) disk as taught by Cheline. One of ordinary skill in the art would have been motivated to employ the teachings of Cheline in order to provide a less complex, less efficient, and less costly method for configuring a VPN is provided. (see Cheline paragraph [0017], lines 1-5)

**Regarding Claim 42**, Aiello discloses a VPN capable end system, comprising:

software stored on the permanent memory, the software having instructions executable by the processor while the end system is permitted access to a VPN protected network on at least one VPN connection, continuously monitor for attempted writes to the end system and to continuously monitor for traffic on the end system and filter detected traffic inbound to the end system that is not on the VPN connection. (see Aiello paragraph [0007], lines 1-6; paragraph [0009], lines 1-5: data exchange over a secure channel such as a VPN tunnel, can be monitored to detect potential security breaches; monitor module)

Aiello does not specifically disclose preventing detected attempted writes to the permanent memory and purging temporary memory.

However, Harrison discloses:

d) preventing detected attempted writes to the permanent memory and purging the temporary memory. (see Harrison col. 6, lines 28-31: provide client side persistent storage for untrusted clients; col. 4, lines 60-66: access to storage for client system; storage integrity and security if removed from programmer : col. 5, lines 46-48: data repository size; col. 5, lines 52-55: expiration of predefined time period; temporary file (no writes to permanent storage on client system))

It would have been obvious to one of ordinary skill in the art to modify Aiello for preventing detected attempted writes to permanent memory and purging temporary memory as taught by Harrison. One of ordinary skill in the art would have been

motivated to employ the teachings of Harrison in order to allow untrusted applets to have access to persistent storage without compromising the integrity of the client computer system. (see Harrison col. 4, lines 60-62)

Aiello does not specifically disclose at least one permanent memory, at least one temporary memory and at least one processor coupled to the permanent memory and the temporary memory.

However, Cheline discloses:

- a) at least one permanent memory; (see Cheline paragraph [0047], lines 1-10:  
permanent type memory for program such as operating system)
- b) at least one temporary memory; (see Cheline paragraph [0058], line 1:  
temporary memory)
- c) at least one processor coupled to the permanent memory and the temporary memory; (see Cheline paragraph [0047], lines 1-3: processor, interface (bus) between components)
- d) termination of the VPN connection. (see Cheline paragraph [0071], lines 1-3:  
VPN access to end system enabled; paragraph [0076], lines 1-5: logoff user,  
VPN disconnected or inactive; paragraph [0076], lines 10-14: VPN disconnected,  
tunnel torn down)

It would have been obvious to one of ordinary skill in the art to modify Aiello for at least one permanent memory, at least one temporary memory and at least one processor coupled to the permanent memory and the temporary memory and termination of the VPN connection as taught by Cheline. One of ordinary skill in the

Art Unit: 2136

art would have been motivated to employ the teachings of Cheline in order to provide a less complex, less efficient, and less costly method for configuring a VPN is provided. (see Cheline paragraph [0017], lines 1-5)

**Regarding Claim 48**, Aiello discloses the end system of claim 42, wherein the software further has instructions executable by the processor. (see Aiello paragraph [0054], lines 1-3: monitors can be done in software (instructions)) Aiello does not specifically disclose that the end system is not permitted the access to facilitate authentication of a user of the end system to the VPN protected network. However, Cheline discloses wherein while the end system is not permitted the access to facilitate authentication of a user of the end system to the VPN protected network. (see Cheline paragraph [0043], lines 1-8; paragraph [0069], lines 4-11: access only after user authentication)

It would have been obvious to one of ordinary skill in the art to modify Aiello where the end system is not permitted the access to facilitate authentication of a user of the end system as taught by Cheline. One of ordinary skill in the art would have been motivated to employ the teachings of Cheline in order to provide a less complex, less efficient, and less costly method for configuring a VPN is provided. (see Cheline paragraph [0017], lines 1-5)

**Regarding Claim 55**, Aiello discloses a VPN capable end system, comprising:

- a) a plurality of memories consisting of at least one write-protected permanent memory and at least one temporary memory (see Cheline paragraph [0047],



lines 1-10: permanent type memory for program such as operating system; paragraph [0058], line 1: temporary memory); at least one processor coupled to the memories (see Cheline paragraph [0047], lines 1-3: processor, interface (bus) between components);

- b) software (see Aiello paragraph [0054], lines 1-3: monitor implemented in software; paragraph [0048], lines 7-14: tunnel hosts include various computers) stored in the permanent memory, the software having instructions executable by the processor while the end system is permitted access to a VPN protected network on at least one VPN connection to continuously monitor traffic on the end system and filter detected traffic inbound to the end system that is not on the VPN connection, and to continuously monitor for termination of the VPN connection. (see Aiello paragraph [0007], lines 1-6; paragraph [0009], lines 1-5: monitor data exchange over a secure channel such as a VPN tunnel, can be monitored to detect potential security breaches; monitor module; paragraph [0009], lines 1-6: detect non-VPN traffic)

Aiello does not specifically disclose attempted writes to the end system and preventing detected attempted writes to permanent memory and purging temporary memory. However, Harrison discloses wherein monitor for attempted writes to the end system and prevent detected attempted writes to the permanent memory and purge the temporary memory. (see Harrison col. 6, lines 28-31: provide client side persistent storage for untrusted clients; col. 4, lines 60-66: access to storage for client system; storage integrity and security if removed from programmer : col. 5,

lines 46-48: data repository size; col. 5, lines 52-55: expiration of predefined time period; temporary file (no writes to permanent storage on client system))

It would have been obvious to one of ordinary skill in the art to modify Aiello for attempted writes to the end system and preventing detected attempted writes to permanent memory and purging temporary memory as taught by Harrison. One of ordinary skill in the art would have been motivated to employ the teachings of Harrison in order to allow untrusted applets to have access to persistent storage without compromising the integrity of the client computer system. (see Harrison col. 4, lines 60-62)

Aiello does not specifically disclose monitoring for termination of the VPN connection. However, Cheline discloses wherein monitoring for termination of the VPN connection. (see Cheline paragraph [0076], lines 1-5: logoff user, VPN disconnected or inactive; paragraph [0076], lines 10-14: VPN disconnected, tunnel torn down)

It would have been obvious to one of ordinary skill in the art to modify Aiello to monitor for termination of the VPN connection as taught by Cheline. One of ordinary skill in the art would have been motivated to employ the teachings of Cheline in order to provide a less complex, less efficient, and less costly method for configuring a VPN is provided. (see Cheline paragraph [0017], lines 1-5)

**Regarding Claim 55**, Aiello discloses the end system of claim 55, wherein the software further has instructions executable by the processor while the end system is permitted

the access to redirect to the temporary memory detected attempted writes to the permanent memory. (see Aiello paragraph [0054], lines 1-3: monitors done (implemented) in software; paragraph [0048], lines 7-14: tunnels hosts include various computers and workstations running any number of operation systems; portable computers (permanent memory used to hold software portable computers))

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlton V. Johnson whose telephone number is 571-270-1032. The examiner can normally be reached on Monday thru Friday , 8:00 - 5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser Moazzami can be reached on 571-272-4195. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

Art Unit: 2136

USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nasser G Moazzami/  
Supervisory Patent Examiner, Art Unit 2136

Carlton V. Johnson  
Examiner  
Art Unit 2136

CVJ  
June 9, 2008